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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,844	07/24/2001	David Pierre Gendron	1027-001US01	3911
38356	7590	05/06/2005	EXAMINER	
BROOKS & CAMERON, PLLC 1221 NICOLLET MALL #500 MINNEAPOLIS, MN 55403			LE, HIEU C	
			ART UNIT	PAPER NUMBER
			2142	

DATE MAILED: 05/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/911,844

Applicant(s)

GENDRON ET AL.

Examiner

Hieu c. Le

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-16 and 18-20 ^{21-40 BP} is/are pending in the application.
- 4a) Of the above claim(s) 21-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7-24-05 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's election with traverse of Group I claims 1-20, on 2/22/05 is acknowledged. The traversal is on the ground(s) that each the independent claims are drawn to generally to either methods or a routing the network communications and search will not created a serious burden on the Examiner. This is not found persuasive because the claimed subject matter covers a diverse area, Group I, a method for routing medical images, and group II, a method for routing message by translating application information of the network domain. Group III, a method for storage and retrieval of patient medical image data. Group, IV, a method for querying a storage system using GUID and routing information. The groups are distinct from each other and the search required for one groups is not required by the other.

The requirement is still deemed proper and is therefore made FINAL.

Claim Objections

2. Claims 2-4,8-12,15-20 are objected to because of the abbreviation "DICOM". Applicant has to recite the complete name of "DICOM" as "Digital image Communication Medical" in the claims.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this

subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2, 7, 12, 14, 15 are rejected under 35 .S.C. 102(e) as anticipated by Cooke et al. [US. Pat.No. 6,574,629] .

As to claim 1, Cooke discloses a method comprising:

storing routing information mapping destinations to routes within a network [a user input information of routing pattern in the form shown in Fig. 7, the routing pattern associated with routing destinations (col. 17; lines 52-60), the routing pattern is added to the routing rule in the table to the network gateway (col. 18, line 2-3, col. 19, lines 2-5) (i.e. stored in the Gateway)].

storing a set of routing rules (col. 18; line 2-6)].

receiving a network communication comprising destination information and data [the gateway receives images or studios (data) (col. 9; line 65-col. 10, line 3), and referring physical or patient location (destination information) (col. 13, lines 13-15, p. 17, lines 26-30)]

selecting a route from the routing information based on the destination information of the network communication and a result of the compassion [col. 16, lines 62-65, col. 18; lines 7-16, lines 41-53)] and forwarding the network communication according to the selected route (col. 15, lines 61-65).

Cooke discloses that the images (network communication) is routed to appropriate location based on a predetermined rules (col. 15, lines 60-65).

Cooke does not explicitly discloses comparing at least a portion of the data to the set of routing rules.

However, this step is inherent in Cooke method because as explained above the data are routed to an appropriate location based on the predetermined routing rules which can not be achieved unless the data is compared , or matched, or correlated to routing rules in order to determine the appropriate location based on that comparison.

As to claim 2, Cooke further discloses wherein the network comprises a medical imaging network and the network communication complies with DICOM protocol, and further wherein storing routing information comprises storing routing information mapping Application Entity Names (AENames) to routes within the medical imaging network [DICOM protocol (fig. 5, item 66, AEName (Fig. 7, item 49, AE title)].

Claim 7 is a broader version of claim 1, and is rejected for the same reasons indicated in claim 1.

As to claim 12, refer to claim 2 rejection.

As to claim 14, refer to claim 1 rejection.

Cooke further discloses a computer readable medium (Fig. 2).

As to claim 15, refer to claim 2 rejection.

5. Claims 3, 8, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooke et al. [US. Pat.No. 6,574,629] as applied to claims 2, 7,15 above and further in view of F. Foiravanti et al. "The Organization and Management of a Wide Environment of DICOM Compliant Device: the DICOM Domain Management Service Class", IEEE , pp 20-25,1998.

As to claim 3, Cooke discloses using application Entity (AE) titles (Fig. 7) and IP routing capabilities (col. 15, lines 45-46).

Cooke does not disclose wherein selecting a route from the routing information comprises comparing an AENAME defined within the network communication to the AENAME defined within the routing information.

Fioravanti discloses a system for organizing DICOM services in a hospital structure by identifying DICOM devices that communicate with each other through an AE title (Application entity) title which organizes the structure in domains (Page 21, RC, lines 1-14). DICOM application entities are able to communicate with each other through an AE title can communicate by checking the AE titles and the IP address (p.23, Lc, lines 14-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Fioravanti's teachings to modify the method of Cooke by checking AE title in the network communication with AE title within routing information in order to manage and organize a large number of devices and for handling a valid security policy.

As to claim 8, refer to claim 3 rejection.

As to claim 16, refer to claim 3 rejection.

6. Claims 4, 9, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooke et al. [US. Pat.No. 6,574,629] as applied to claims 1, 7, 14 and in view of Rothschild et al. [Pub. No. 2002/0016718 A1].

As to claim 4, Cooke discloses wherein the network communication complies with the DICOM protocol, and further wherein comparing at least a portion of the

medical imaging data comprises: parsing the medical imaging data and assessing a routing rule from the set of routing rules based on the DICOM (col. 17, lines 13-25).

Cooke does not disclose a set of DICOM tags and corresponding data.

Rothschild discloses a medical image manage system and method that uses a Central data management system to centrally manage the storage and transmission of electronic records containing medical images (col. 5, [0036-0037]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Rothschild's teachings to modify the method of Cooke by using a set of DICOM tags in order to electronically transport medical images efficiently.

As to claim 9, refer to claim 4 rejection.

As to claim 17, refer to claim 4 rejection.

7. Claims 5-6, 10-11, 13, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooke et al. [US. Pat.No. 6,574,629] as applied to claims 1, 7 above and further in view of Stephen T.C Wong et al. " A Digital Library for Biomedical Imaging on the Internet." IEEE, pp. 84-91, 1999.

As to claim 5, Cooke discloses storing a set of routing rules comprises storing an XML-based set of rules, wherein the rules conform to a user-defined grammar for routing the medical imaging data [As shown in 11 the routing rules are added to routing table (stored) by a user defined grammar], Cooke using HTML based rules (col. 17, lines 1-5). Cooke does not disclose XML based set of rules. Wong discloses an DICOM

system for medical images that uses XML to further enhance browser capabilities by providing user defined types (p. 87, Lc, lines 8-21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Wong's teachings to modify the method of Cooke by XML Based rules in order to enhance browser capabilities by providing user defined types.

As to claim 6, Cooke further discloses further comprising presenting an interface for receiving user input that defines the user-defined grammar [the form displayed to the user to enter and modify rules in Fig. 11, is an interface receiving user input].

As to claim 10, refer to claim 5 rejection.

As to claim 11, refer to claim 6 rejection.

As to claim 13, refer to claim 5 rejection.

As to claim 18, refer to claim 5 rejection.

As to claim 19, refer to claim 6 rejection.

As to claim 20, Cooke further discloses wherein the user input defines tags including a patient identifier, an imaging modality [patient ID (col. 17, lines 50-51) imaging modality (Fig. 11)].

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hieu Le whose telephone number is (571) 272-3897.

The examiner can normally be reached on M-F 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harvey, Jack can be reached on (571)272-3896 fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


BEATRIZ PRIETO
PRIMARY EXAMINER